

## Tip

To change references in formulas, highlight the cell and press *F4* to cycle through the four types of references. To cycle only part of the formula select the cells in the formula bar and cycle with *F4*. Selecting the menu option **Sheet > Cycle Cell Reference Types** is equivalent to pressing the *F4* shortcut.

Knowledge of the use of relative and absolute references is essential if you want to copy and paste formulas and to link spreadsheets.

## Named ranges

Cells and cell ranges can have a name assigned to them. Naming cells and ranges enhances formula readability and document maintenance. A simple example would be naming a range of cells B1:B10 as “Weight” and sum all weights. The formula is `=SUM(B1:B10)`. When the range B1:B10 is named as *Weight*, you can transform the formula to `=SUM(Weight)`. The advantage is clear in terms of readability of the formulas.

Another advantage is that all formulas that have the named range as argument are updated when the named range changes location or size. For example, if the range *Weight* is now in cells P10:P30, you do not need to review all the formulas that have *Weight* as an argument; you only need to update the named range *Weight* with the new size and location.

To define a named cell or range select the cell or range and use menu **Sheet > Named Ranges and Expressions > Define**. The dialog in Figure 224 appears with the selected range and you define the name and scope of the named range.

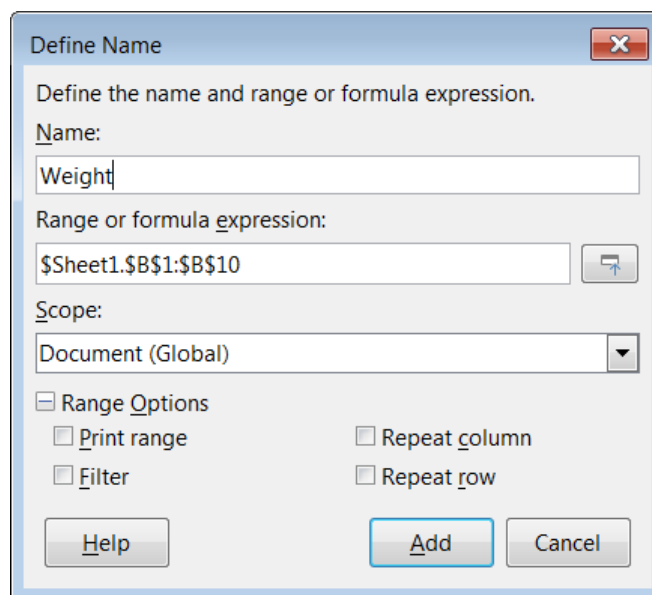


Figure 224: Define Name dialog

You can also define a named range directly in the sheet by selecting the range and typing its name in the Name Box at the left of the Formula Bar (Figure 225).